

# SMART RFID TAG

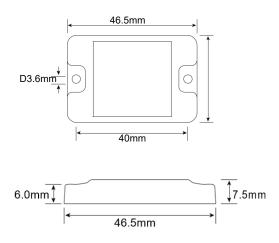
## Rhino HT 4631



Rhino HT 4631 is a RAIN (UHF) RFID hard tag especially designed for industrial applications and can be embedded in or applied to concrete surfaces. This tag has an impact resistant encapsulation that makes it ideal for usage in harsh industrial environments. The tag offers resistance to high temperatures, is leak-proof and, corrosion resistant.

Offered with an Alien Higgs 3 chip, this tag offers good read range performance. The customer can also choose from a few other chip options available for this tag.

PHYSICAL SPECIFICATION		
Tag Material	PPS	
Tag Dimensions	46.5 x 31.5mm x T: 7.5mm, Hole: D 3.6mm x 2 1.83 x 1.24 in x T:0.295in, Hole: D 0.141in x 2	
Mounting Methods	Embedded in concrete	
Weight	22 g	
Delivery Format	Single Pieces	



RF SPECIFICATION	
Mode of Operation	Passive
Device Type	Plastic Hard Tag
Air Interface Protocol	EPC Class1 Gen2, ISO18000-6C
Operational Frequency	ETSI: 865-868MHz FCC: 902-928MHz
IC Type*	Alien Higgs 3
Memory Configuration	EPC 96bits (Up to 480bits) , USER 512bits, TID64bits
Write Cycle Endurance	100,000
Data Retention	Upto 50 years
Applicable Surface Materials	Metallic surfaces, Concrete surfaces (can also be embedded into concrete)
Read Range (Fixed Reader)	ETSI : On metal 6.6m FCC : On metal 6.5m
Read Range (Handheld Reader)	ETSI : On metal 4.6m FCC : On metal 4.4m
Reading range when embedded 5cm depth in concrete (Handheld Reader)	ETSI : 2.1m FCC : 2.2m
Reading range when embedded 10cm depth in concrete (Handheld Reader)	ETSI: 1.9m FCC: 2.0m

ENVIRONMENTAL RESISTANCE	
Operating Temperature	-40°C to +100°C / -40°F to +212°F
Withstands Exposure To	-40°C to +100°C / -40°F to +212°F
Peak Temperature	+150°C / +302°F
Recommended Application Temperature	+10°C to +38°C / 50°F to +100.4°F
Water Resistance (IP Rating)	IP68
Ideal Storage Condition	-40°C to +150°C / -40°F to 302°F
Expected Lifetime	Years in normal operating conditions

#### PRODUCT INSTALLATION



The tag can be attached to the surface using the following fixing method

#### • Mechanical Fixing / Embedding:

Achieved by using a screw and is a recommended for environments that involve high mechanical stress. During fixing make sure there is no air gap left in between the metal surface and tag. This tag can also be embedded into the concrete surface.

#### **PERSONALIZATION OPTIONS**

#### **Pre-encoding**

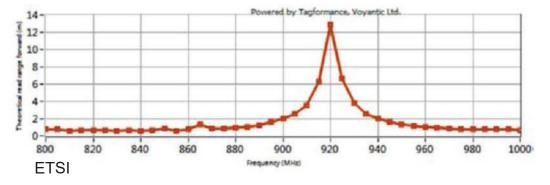
· Customer specific encoding of EPC

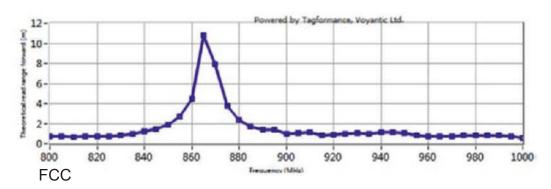
#### **ORDER INFORMATION**

#### **Part Number**

- RF.HT.4631.ETSI.H3
- RF.HT.4631.FCC.H3

### **READ RANGE GRAPHS (ETSI & FCC)**





<sup>\*</sup> Other IC's available on request are Monza M4QT, Monza R6, UCODE 7XM+



version : 170221.01

<sup>\*\*</sup> The indicated read range values are measured in our laboratory testing environment, where antennas with optimum directivity are used with maximum allowed operating power. Different surface materials and environments may exhibit different results.